Argonne NATIONAL LABORATORY

THE DOWNLOADABLE DYNAMOMETER DATABASE

Successfully providing easy access to high-quality test data on advanced technology vehicles

ADVANCED POWERTRAIN RESEARCH FACILITY (APRF)

In 2002, the APRF was purpose built to benchmark Advanced Technology Vehicles (ATVs). The experienced researchers test extensively instrumented ATVs on chassis dynamometers. A thermal chamber is capable of testing from well-below freezing to hot and sunny conditions. Sophisticated and advanced new vehicle technologies challenge the staff to invent novel instrumentation, research new test procedures to evaluate these high efficiency vehicles and identify further efficiency gains.

DOWNLOADABLE DYNAMOMETER DATABASE (D3)

A wide range of vehicle architectures and tests conditions

D3 is a public repository of independent vehicle test data that provides the high level of detail useful in the research community. Test vehicles range from conventional vehicles, hybrid electric vehicles, plug-in hybrid vehicles and battery electric vehicles as well as alternative fuel vehicles (hydrogen, natural gas, ethanol...). Typically, vehicle- and component-level data is generated from standard transient test cycles in temperature conditions of 20°F, 72°F and 95°F with 850 W/m2 of radiant sun energy.

A wide range of users download the data

Openly shared vehicle data is rare outside of the largest industry labs. The major regular users of the database include:

- **Academia:** Research conducted at universities.
- **Government:** Model development and validation, and quantification of challenges and opportunities in AVTs.
- **Suppliers:** For a deeper understanding of new technologies across the competitive automotive landscape.

MORE DATA IS AVAILABLE

Only a small percentage of signals and subset of tests are posted for each vehicle. If you are interested in more data or specific analysis on specific cars or technologies, please contact us.

CONTACT

Henning Lohse-Busch
Manager
Vehicle Systems Research Group
Phone: 630-252-9615
E-mail: hlb@anl.gov
www.anl.gov/d3

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